

Remarks

Applicants are submitting this Preliminary Amendment to address the claim rejections in the Office Action dated 08/26/2003 in parent case serial no. 09/823,150.

In the last Office Action, paper no. 13 of the parent case, claims containing the terms:

Amino dextran (AMD) and diamino PEG 2000 sensors;

PEG 2000;

Surfactant substance;

and Poly (Glu,Tyr) 4:1 and Raytide™ EL

have been finally rejected under 35 USC 112, second paragraph.

1. In the Office Action, the Examiner alleges it is unclear what the relationship is between Amino dextran (AMD) and diamino PEG 2000 to the sensors.

Applicants contend that it would be clear to one of ordinary skill in the art that these are 'sensor surfaces' as recited in the claims. The "relationship" is that aminodextran and diamino PEG 2000 is the coating of the sensor. Such coatings as well as methods of their production are well known in the art. The specification discloses said sensors on page 6 where additionally reference is given to Schütz and Piehler et al, each document provided in the Supplemental IDS enclosed herewith. See complete citations on page 32 of the specification. Schütz (cited reference 17 on page 32) is a doctoral thesis published April 17, 2000, the relevant pages from Schütz (front sheet and pages 37 and 38) have been provided, and can be summarized as follows:

Section No 3.2 deals with Methods.

Sub-section No 3.2.1. deals with modification of transducer surfaces (i.e. it shows the relationship between AMD and Diamino PEG 2000). It described the methods how a said surface become modified on the one hand with aminodextran and on the other with Diaminopolyethyleneglycol (xx).

Piehler et al (reference 12 on page 32) discusses surface modification on pages 580 to 583 showing that modification of surfaces are needed for immunoprobng (antibody –

protein interaction). Additionally it discloses that the use of dextran for surface modification is prominent in many fields of affinity interaction analysis. The preparation of Aminodextran (AMD) itself and its coupling on a surface is disclosed as well as its characteristic in comparison to CHI, PEI, POE and PAM. See pages 585-589.

In view of the teaching in the specification and use of these terms in the art, applicants contend that the terms Amino dextran (AMD) and diamino PEG 2000 sensors are precise and definite.

2. PEG 2000

PEG is a common abbreviation for polyethylene glycol; “2000” is the molecular weight thereof.

3. Surfactant substance

The bottom of pages 4 through page 5 provide a clear and concise definition of this term:

“A process according to the present invention comprises the use of a so-called "surfactant" which is capable of reducing or preventing non-specific binding of a molecule (e.g. a receptor, a substrate, a modified substrate, an enzyme or other substances which may be used in the processes according to the invention), particularly non-specific binding to a sensor surface and/or receptor binding site used when carrying out the present invention. “

Immediately thereafter the the specification provides a preferred embodiment of a surfactant, that being Brij 35 (CAS number 9002-92-0).

Applicants believe therefore that a clear, precise and definite description has been provided for the term “surfactant substance” such that taken together with what is known in the art, one of ordinary skill can ascertain the metes and bounds of the claims.

4. Poly (Glu,Tyr) 4:1 :

Applicants would like to respectfully point out that this term is not a trademark, but a correct expression for the substance which is written in full “Poly (L-glutamic acid L- tyrosine)sodium salt 4:1, whereby 4:1 gives the ratio of both amino acids. Thus, the term is descriptive of the product, rather than the source, and such meaning would be readily apparent to those of ordinary skill in the art. The enclosed pages from Sigma-Aldrich listed in the present IDS identify the CAS-number 97105-00-5 applicants have listed in the specification. It specifies two types of Poly (L-glutamic acid-L tyrosine), one in a 4:1 ratio and another in a 1:1 ratio. Also to establish that this term is well know in the art applicants have submitted in the IDS Deshpande et al 1999. The reference shows on page 252 (arrow at the bottom) in the “materials and methods” the use of the expression “poly (Glu,Tyr) 4:1” from Sigma Chemical Co.

Raytide™ EL :

Regarding the trademark: Raytide™ EL, Applicants have incorporated the specific sequence as sold by Calbiochem under this mark. Until the published 2002 catalog, Calbiochem did not disclose an amino acid sequence. However, in the catalog of 2002 they disclose the sequence: KKKGPWLEEEEEAYGWLDF, which is the abbreviated equivalent of Lys-Lys-Lys-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Leu-Asp-Phe which replaces the term Raytide™ EL in the present claims. Enclosed please find a copy of the relevant catalog pages.


In view of the foregoing Applicants believe they have addressed any 35 USC 112, second paragraph issues. The present claims are therefore believed to be allowable, early notification is respectfully requested.

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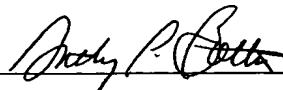
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12/3/2003

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